

NOTES FROM THE PHAENOGRAMIC HERBARIUM OF THE
NEW ENGLAND BOTANICAL CLUB,— II.

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THE announcement of the summer meeting of the Josselyn Botanical Society of Maine to be held at Brunswick, August 22–25, 1911, makes it appropriate to select from a large mass of Maine notes the following items which may be of special interest to those planning to attend the field-meeting and which will suggest many points for further observation, especially with the possibility of range-extensions. These notes may be called

SOME NOTABLE PLANTS OF THE BRUNSWICK REGION.

ASPIDIUM SIMULATUM Davenp. The only stations yet known in Maine are the original one described by Davenport when he published the species (Indian Point, Georgetown, June, 1893) and wet woods at Southport (*M. L. Fernald*, August 1, 1894). These stations so nearly approach Brunswick that the species should be sought there — in Red Maple swamps and similar habitats.

POTAMOGETON PECTINATUS L. The only Maine specimens seen by the writer came from brackish pools along Winnegance Creek, Phippsburg (collected in flower August 23, 1909).

LOPHOTOCARPUS SPONGIOSUS (Engelm.) J. G. Smith. Brackish mud of ditches, rills, etc., Winnegance Creek, Phippsburg, September 21, 1907 (*Kate Furbish*), August 23, 1909 (*Fernald & Wiegand*). See *RHODORA*, xii. 120 (1910).

AGROSTIS ALBA L., var. *ARISTATA* Gray. One of the few stations known to the writer is a patch of low woods at Southport (August 8, 1894). The variety is also found at Fairfield (*J. A. Allen*) and should be sought elsewhere.

TRisetum SPICATUM (L.) Richter, which is rare in southern Maine, was collected by Miss Furbish at Brunswick, in 1878.

ERAGROSTIS PILOSA (L.) Beauv. was collected by Miss Furbish at Harding's, Brunswick, in 1899. It is apparently spreading northward along the railroads.

ERAGROSTIS MEGASTACHYA (Koeler) Link, another species which, like the preceding, is apparently traveling northward on railroad filling and ballast, was collected by Miss Furbish at Brunswick in August, 1891.

AGROPYRON PUNGENS (Pers.) R. & S., one of the least known of our American grasses, occurs on beaches or dry marshes from Pine Point to Cumberland and on Monhegan Island. It is probably somewhat general along the southern half of the Maine coast but is as yet known only from the points named and at stations on Cape Elizabeth at one of which it was first detected by Tuckerman in 1860.

CYPERUS NUTTALLII Eddy. The northernmost station known to the writer is on the brackish marsh by Winnegance Creek, Phippsburg (*Kate Furbish*, September 14, 1907; *Fernald & Wiegand*, August 23, 1909). See RHODORA, xii. 120 (1910).

ELEOCHARIS OLIVACEA Torr., a comparatively rare species in Maine, occurs in tidal mud of the Androscoggin River at Brunswick (*Kate Furbish*, October, 1891; *C. A. Davis*, August 1, 1894). It also grows in brackish mud at Winnegance and may prove to be somewhat generally distributed throughout the region.

ELEOCHARIS DIANDRA C. Wright. The station described by Dr. Charles A. Davis in RHODORA, iv. 2 (sand- and mud-banks of the Androscoggin, covered at high tide, Brunswick) is the only one yet known in the state.

ELEOCHARIS ROSTELLATA Torr. The station (salt marsh along Winnegance Creek, Phippsburg) recorded in RHODORA, xii. 120 and 135 is the only one known in Maine.

SCIRPUS SMITHII Gray, var. SETOSUS Fernald. Muddy bank of the Androscoggin River, Brunswick, August 1, 1894 (*C. A. Davis*), September 15, 1904 (*Kate Furbish*). The only Maine station known.

SCIRPUS FLUVIATILIS (Torr.) Gray. Winnegance Creek, Phippsburg, September 14, 1907 (*Kate Furbish*), August 23, 1909 (*Fernald & Wiegand*). The only authenticated station in Maine. See RHODORA, xii. 120, 134 (1910).

SCIRPUS CAMPESTRIS Britton, var. NOVAE-ANGLIAE (Britton) Fernald. Harding's, Brunswick, September 13, 1891 (*Kate Furbish*).

CAREX AENEA Fernald. The southernmost Maine stations known to the writer are in dry woods at Southport (*Fernald*, July 31, 1894) and on cliffs at Christmas Cove, Bristol (*J. R. Churchill*, July 8, 1903).

CAREX PRASINA Wahlenb., one of the rarer species of Maine, was collected at Brunswick by C. A. Davis in 1894.

CAREX VESTITA Willd. The most northeasterly point known for this species is at Brunswick, where it was collected June 15, 1898, on a sandy embankment by E. B. Chamberlain. See *RHODORA*, vi. 194 (1904).

PELTANDRA VIRGINICA (L.) Kunth. In 1870 Miss Furbish found *Peltandra* in an Alder swamp at Brunswick, a station which has since been obliterated (See A. H. Norton, *RHODORA*, iv. 168). In 1900 Mr. Norton discovered it at Cornish, and there is an old record of the plant at South Berwick (see *RHODORA*, l. c.). Besides material from Brunswick and Cornish there is in the Club Herbarium a very characteristic sheet of specimens collected by Miss Furbish at Livermore Falls in 1878. The species should be watched for throughout southern Maine — in Alder swamps and bottom-lands.

JUNCUS EFFUSUS L., var. *DECIPIENS* Buchenau. The only Maine station known for this slender variety (see *RHODORA*, xii. 87) is a moist thicket at Southport (*Fernald*, July 31, 1894).

JUNCUS ACUMINATUS Michx. The northeastern limit of this species, as far as known, is along Winnegance Creek, Phippsburg, where it was collected by Miss Furbish, July 11, 1899.

ALETRIS FARINOSA L. The only Maine specimens known to the writer are two inflorescences collected by Miss Furbish in 1874 at Harding's, Brunswick.

SMILAX ROTUNDIFOLIA L. The most northeasterly station for the Catbrier known to the writer is a rocky bank at Cape Popham, Phippsburg.

LEUCOJUM AESTIVUM L. Reported in the 2d Supplement to the Portland Catalogue (1897) as "thoroughly and abundantly established for 15 years in a brook whence it is rapidly spreading, Brunswick (Joshua L. Chamberlain)." Specimens collected by Miss Furbish in 1899 are in the Club Herbarium.

HABENARIA DILATATA (Pursh) Gray. There are specimens in the Club Herbarium collected by several botanists at various times at Brunswick, but only one from farther south in Maine: Cumberland (*E. B. Chamberlain*).

HABENARIA MACROPHYLLA Goldie. Among the Maine stations for this splendid species should be noted Brunswick (*Kate Furbish*).

SALIX PELLITA Anders. The most southerly station in Maine is at Foster's Point, West Bath, where Miss Furbish collected it in 1892.

RUMEX PERSICARIOIDES L. One of the few Maine stations for this

most distinct Dock is at Fort Popham, Phippsburg (*Kate Furbish*, September 14, 1907).

POLYGONUM FOWLERI Robinson. The southernmost known station for this species is at Cape Newagen, Southport, where the writer found it in August, 1894. In eastern Maine it is common on the strand and at edges of salt marshes and should be sought for at other points west of Penobscot Bay.

POLYGONELLA ARTICULATA (L.) Meisn. The northeastern limit of this characteristic plant of coastal sands seems to be at Fort Popham, Phippsburg.

CHENOPODIUM HUMILE Hook. In August, 1906, Miss Furbish sent to the Gray Herbarium a couple of plants of this species from a ditch at Brunswick. The station is the only one known in the East for this species which is ordinarily found in brackish or saline regions of the Northwest.

ATRIPLEX PATULA L., var. *LITTORALIS* (L.) Gray, which is much less common than var. *hastata*, was collected by Miss Furbish at Foster's Point, West Bath, July 28, 1902.

SUAEDA LINEARIS (Ell.) Moq. is unknown in Maine from east of Brunswick. It was collected by Miss Furbish at Harding's in September, 1899.

ARENARIA GROENLANDICA (Retz.) Spreng. In the 2d edition of Gray's Manual this was reported from "Bath, Maine, on river-banks near the sea," but the original label in the Gray Herbarium of the plant collected by William Gambel reads: "rocks of the Ken[n]ebec near Bath." In the Club Herbarium are specimens from Bath (*Kate Furbish*) and from a rocky bank at Cape Popham, Phippsburg (*Fernald*). It is probable that the *Arenaria* is to be found at other stations in the region.

RANUNCULUS PENNSYLVANICUS L. f. There are no Maine specimens in the Club Herbarium from south of Brunswick, and its southern limit in Maine is probably in that region.

POTENTILLA ANSERINA L. The typical pubescent plant (see *RHODORA*, xi. 8) which, as far as known, is confined in Maine to the valleys of the St. John, Penobscot, and Androscoggin Rivers, occurs at Topsham (*Kate Furbish*, 1870).

ROSA ACICULARIS Lindl., var. *BOURGEAUIANA* Crépin. One of the few New England stations for this characteristic northern rose is at Foster's Point, West Bath, where it has many times been collected by Miss Furbish on "high land, on beach."

EUPHORBIA POLYGONIFOLIA L. is confined in Maine to the southwestern coast, the northernmost stations apparently being on the sands of Brunswick (*Kate Furbish*), Phippsburg (*Kate Furbish, M. L. Fernald*), and Georgetown (*H. M. Noyes*).

EUPHORBIA HELIOSCOPIA L., common in northern Maine but rare southward, was collected by Miss Furbish at Brunswick in 1885.

EUPHORBIA PEPLUS L., another unusual species, has been known as a garden weed in Brunswick for more than forty years (*Kate Furbish*).

COREMA CONRADII Torr. One of the earliest known stations for *Corema* was "in rupestribus aridis, prope Bath, Mainensium."¹ The plant was actually found in 1840 by William Gambel, a pupil of Thomas Nuttall, "on the rocky banks of the Kennebec, in the neighbourhood of Bath,"² and Redfield collected it August 5, 1884 on "barren rocky knolls on a wooded ridge 2 miles west of Bath." There are other stations in the Brunswick region: Gun Point, Harpswell (*Kate Furbish*); "every rocky place," Southport (*M. L. Fernald*); and dry ledges, Bristol (*E. B. Chamberlain*). In all these stations as elsewhere in its range the shrub grows in highly silicious soils and it will be interesting to determine to what extent it occurs in the region of the lower Kennebec and Androscoggin.

TILIA CORDATA Mill., one of the common European Lindens planted in America, seems to be established at Brunswick (Harding's) and at Foster's Point, West Bath, where Miss Furbish has several times collected it.

HELIANTHEMUM CANADENSE (L.?) Michx. is much less common in Maine than *H. majus* which extends eastward into the Penobscot Valley. The most northeastly station for *H. canadense* represented in the Club Herbarium is "The Park," Brunswick (*Kate Furbish, August, 1903*).

HUDSONIA ERICOIDES L., a local species in Maine, occurs at several stations slightly south of Brunswick: Small Point (*Edith Boardman, 1888*), Cape Popham (*M. L. Fernald*), and Hunnewell Point (*C. G. Atkins*).

HUDSONIA TOMENTOSA Nutt. is not represented in the Club Herbarium from east of the Kennebec. The easternmost specimens are from Fort Popham (*M. L. Fernald, 1894*) and from Hunnewell Point (*C. G. Atkins*).

¹ Gray, *Chloris Bor.-Am.* 4 (1846).

² Gray, l. c. 6.

VIOLA BRITTONIANA Pollard. The only Maine material seen of this cut-leaved *Viola* was collected at Georgetown, July, 1900, by Miss H. M. Noyes (now Mrs. Hollis Webster).

MYRIOPHYLLUM SPICATUM L. The only Maine material of this species (which about the Gulf of St. Lawrence prefers brackish water) seen by the writer is from Winnegance, Phippsburg (*Kate Furbish*, 1896).

KALMIA LATIFOLIA L. is a local species in Maine. One of its few stations is on Great Island, Harpswell (*Kate Furbish*, August, 1900).

GAYLUSSACIA BACCATA (Wang.) C. Koch, forma *LEUCOCARPA* (Porter) Fernald. The only station in Maine for the white-fruited huckleberry seems to be Miss Furbish's colony at Brunswick.

VACCINIUM VITIS-IDAEA L., var. *MINUS* Lodd., a rare plant south of Penobscot Bay, is found at "the Gurnet," Brunswick, and at Harpswell (*Kate Furbish*).

SAMOLUS FLORIBUNDUS HBK., an extremely local plant in Maine, is abundant along rills in the brackish marsh of Winnegance Creek, Phippsburg, flowering from July to September. See *RHODORA*, xii. 120 (1910).

GENTIANA LINEARIS Froel. occurs at several stations in Cumberland and adjacent counties, among them Brunswick and West Bath (*Kate Furbish*).

BARTONIA VIRGINICA (L.) BSP. is local on the Maine coast. In the Club Herbarium there is good material collected in August, 1900, at Georgetown by Miss H. M. Noyes (Mrs. Hollis Webster).

LIMOSELLA AQUATICA L., var. *TENUIFOLIA* (Wolf.) Pers. The only authenticated station in Maine is in deep brackish mud of Winnegance Creek, Phippsburg. See *RHODORA*, xii. 120, 143 (1910).

GERARDIA VIRGINICA (L.) BSP. Although this species extends slightly north of Brunswick, it is apparently rare or local north of Portland. The Club Herbarium contains five different collections of it from Brunswick, one from South Poland, and one from Cumberland; but all others are from farther south.

ODONTITES RUBRA Gilib. has long been known from the coast of Lincoln County, on mainland and islands, and is found at some stations (Fort Popham, Cundy's Harbor, etc.) in Sagadahoc and Cumberland Counties. No specimens from nearer Brunswick have come to the writer's attention.

LONICERA DIOICA L. It is probable that this climbing honey-

suckle reaches its northeastern limit in the Brunswick region. The Club Herbarium has numerous specimens, collected chiefly by Miss Furbish, from West Bath, Harpswell, and Brunswick (bank of Stevens River, "Gurnet," and New Meadows River).

SOLIDAGO RACEMOSA Greene. This very characteristic species, confined to rocks along a few of our northeastern rivers (St. John, Aroostook, Kennebec, etc.) has a fine colony on one of the islands of the Androscoggin at Brunswick.

SOLIDAGO ULMIFOLIA Muhl. The most northeasterly station yet known for this plant (somewhat like *S. rugosa*, but with glabrous stems) is on a rocky bank at Cape Popham, Phippsburg (*M. L. Fernald*, August 6, 1894).

ASTER LINDLEYANUS T. & G. seems to reach its southern limit in Maine in the Brunswick region. The writer has before him five sheets collected by various botanists at Brunswick and one sheet from near Bull Rock Bridge, West Bath.

ASTER TARDIFLORUS L., another northern species, is as yet unknown in Maine from south of Brunswick. It was collected there by Miss Furbish in 1894.

BIDENS HYPERBOREA Greene. The only known region of the United States for this boreal species is the salt marsh along Winnegance Creek, Phippsburg. See *RHODORA*, xii. 120, 144 (1910), also x. 201 (1908).

SENECIO SYLVATICUS L. This species abounds on the sea-cliffs of eastern Maine (see *RHODORA*, xii. 106), but the southernmost stations yet known in the state are ledges and cliffs at Southport (*M. L. Fernald*, August 4, 1894) and Georgetown (*H. M. Noyes*, August, 1900).

SENECIO ROBBINSII Oakes is known from East Auburn (*E. D. Merrill*, August, 1896) and from Great Diamond Island, Portland Harbor (*Kate Furbish*, 1887) and should be sought in the intervening territory.

CIRSIUM PUMILUM (Nutt.) Spreng. The most northeasterly station represented in the Club Herbarium is Brunswick, but the plant undoubtedly extends on gravelly and more sterile areas considerably northeast of that region.

GRAY HERBARIUM.